

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

- 1 1. (Original) A method for treating presbyopia in a patient, the method
2 comprising:
3 ablating a central zone of a corneal surface of a first eye of the patient to improve
4 the patient's ability to view near objects through the central zone of the first eye; and
5 ablating a peripheral zone of a corneal surface of a second eye of the patient to
6 improve the patient's ability to view near objects through the peripheral zone of the second eye.
- 1 2. (Original) A method as in claim 1, wherein the central zone produced
2 during the first ablating step comprises a substantially spherical surface.
- 1 3. (Original) A method as in claim 1, wherein the central zone produced
2 during the first ablating step comprises a multifocal aspheric surface.
- 1 4. (Original) A method as in claim 1, wherein ablating the central zone of
2 the corneal surface of the first eye comprises leaving a small central portion of the corneal
3 surface untreated.
- 1 5. (Original) A method as in claim 1, wherein the ablated central zone has
2 a diameter scaled to a diameter of a pupil of the first eye.
- 1 6. (Original) A method as in claim 1, wherein the ablated central zone has
2 an optical power of between about 0.5 and 4.0 Diopters.
- 1 7. (Original) A method as in claim 6, wherein the ablated central zone has
2 an optical power of between about 1.0 and 3.0 Diopters.

1 8. (Original) A method as in claim 6, wherein the ablated central zone has
2 an optical power of about 1.75 Diopters.

1 9. (Original) A method as in claim 1, further comprising ablating a
2 peripheral zone of the corneal surface of the first eye to improve the patient's ability to view far
3 objects through the peripheral zone of the first eye.

1 10. (Original) A method as in claim 9, wherein the peripheral zone of the
2 first eye extends radially outward from an outer boundary of the ablated central zone of the first
3 eye to a diameter approximately matching an outer boundary of a pupil of the first eye.

1 11. (Original) A method as in claim 9, further comprising ablating a
2 transition zone of the corneal surface of the first eye, the transition zone extending from an outer
3 boundary of the ablated peripheral zone of the first eye.

1 12. (Original) A method as in claim 1, wherein ablating the peripheral zone
2 of the corneal surface of the second eye comprises leaving a central zone of the corneal surface
3 of the second eye untreated to provide for vision of distant objects through the central zone.

1 13. (Original) A method as in claim 12, wherein the central zone of the
2 second eye has a diameter scaled to a diameter of a pupil of the second eye.

1 14. (Original) A method as in claim 1, further comprising ablating a central
2 zone of the corneal surface of the second eye to improve the patient's ability to view distant
3 objects through the central zone.

1 15. (Original) A method for performing laser eye surgery on a patient to
2 treat presbyopia, the method comprising:
3 determining a first ablative shape for a corneal surface, the first ablative shape
4 enhancing vision of near objects through a central zone of an eye;

5 ablating a corneal surface of a first eye of the patient according to the first
6 ablative shape;
7 determining a second ablative shape for a corneal surface, the second ablative
8 shape enhancing vision of near objects through a peripheral zone of an eye; and
9 ablating a corneal surface of a second eye of the patient according to the second
10 ablative shape.

1 16. (Original) A method as in claim 15, wherein the first ablative shape
2 comprises a central zone having a substantially spherical surface.

1 17. (Original) A method as in claim 15, wherein the first ablative shape
2 comprises a central zone having a multifocal aspheric surface.

1 18. (Original) A method as in claim 15, wherein the first ablative shape
2 comprises a small central portion of the central zone that remains untreated.

1 19. (Original) A method as in claim 15, wherein the central zone of the eye
2 according to the first ablation shape has a diameter scaled to a diameter of a pupil of the first eye.

1 20. (Original) A method as in claim 15, wherein the central zone of the eye
2 according to the first ablative shape has an optical power of between about 0.5 and 4.0 Diopters.

1 21. (Original) A method as in claim 20, wherein the central zone of the eye
2 according to the first ablative shape has an optical power of between about 1.0 and 3.0 Diopters.

1 22. (Original) A method as in claim 20, wherein the central zone of the eye
2 according to the first ablative shape has an optical power of about 1.75 Diopters.

1 23. (Original) A method as in claim 15, wherein the first ablative shape
2 includes a peripheral zone, wherein the peripheral zone is shaped to provide for vision of distant
3 objects.

1 24. (Original) A method as in claim 23, wherein the first ablative shape
2 further includes a transition zone, the transition zone extending from an outer boundary of the
3 peripheral zone.

1 25. (Original) A method as in claim 15, wherein the second ablative shape
2 includes an untreated central zone to provide for vision of distant objects.

1 26. (Original) A method as in claim 15, wherein the second ablative shape
2 includes a central zone shaped to improve the patient's ability to view distant objects.

1 27. (Currently amended) A laser eye surgery system for treating presbyopia
2 in a patient, the system comprising:
3 a laser device for emitting a beam of ablative energy; and
4 delivery system optics coupled to the laser device; and
5 a processor coupled with the laser device and the delivery system optics to direct
6 the beam of ablative energy to ablate a first ablative shape on a corneal surface of a first eye of
7 the patient and a second ablative shape on a corneal surface of a second eye of the patient,
8 wherein the first ablative shape enhances near vision through a central zone of the first eye, and
9 the second ablative shape enhances near vision through a peripheral zone of the second eye.

1 28. (Currently amended) A system as in claim 27, wherein the processor
2 includes ~~an ablative shape module~~ a tangible medium having a treatment table embodied thereon,
3 wherein the treatment table includes reference coordinates for directing the laser device to ablate
4 the first and second ablative shapes.

1 29. (Currently amended) A system as in claim ~~[[27]]~~28, wherein the
2 treatment table is configured so that the central zone of the first ablative shape comprises a
3 substantially spherical surface.

1 30. (Currently amended) A system as in claim ~~[[27]]~~28, wherein the
2 treatment table is configured so that the central zone of the first ablative shape comprises a
3 multifocal aspheric surface.

1 31. (Currently amended) A system as in claim ~~[[27]]~~28, wherein the
2 treatment table is configured so that the first ablative shape includes a small untreated central
3 portion within the central zone.

1 32. (Currently amended) A system as in claim ~~[[27]]~~28, wherein the
2 treatment table is configured so that the central zone of the first ablative shape has a diameter
3 scaled to a diameter of a pupil of the first eye.

1 33. (Currently amended) A system as in claim ~~[[27]]~~28, wherein the
2 treatment table is configured so that the central zone of the first ablative shape has an optical
3 power of between about 0.5 and 4.0 Diopters.

1 34. (Original) A system as in claim 33, wherein the central zone has an
2 optical power of between about 1.0 and 3.0 Diopters.

1 35. (Original) A system as in claim 34, wherein the central zone has an
2 optical power of about 1.75 Diopters.

1 36. (Currently amended) A system as in claim ~~[[27]]~~28, wherein the
2 treatment table is configured so that the first ablative shape further comprises a peripheral zone
3 for viewing distant objects.

1 37. (Currently amended) A system as in claim 36, wherein the treatment
2 table is configured so that the first ablative shape further includes a transition zone, the transition
3 zone extending from an outer boundary of the peripheral zone.

1 38. (Currently amended) A system as in claim ~~[[27]]~~28, wherein the
2 treatment table is configured so that the second ablative shape includes an untreated central zone
3 to provide for vision of distant objects.

1 39. (Currently amended) A system as in claim ~~[[27]]~~28, wherein the
2 treatment table is configured so that the second ablative shape includes a central zone shaped to
3 improve the patient's ability to view distant objects.

1 40. (New) A system as in claim 27, wherein the processor includes a module
2 having software comprising tangible media embodying machine-readable instructions for
3 directing the laser device to ablate the first and second ablative shapes.